

REMARKS

Claims 1, 3, 28, 31, 33-35 and 39 are amended. Claims 29-30 and 41 are canceled. Claims 1-7, 28, 31-35, 39-40 and 42-44 are pending in the application. Claims 28 and 31-35 are withdrawn from consideration. Claims 1-7, 39-40 and 42-44 are currently under consideration.

Applicant acknowledges the Examiner's indicated allowability in the subject matter of claim 5.

Claims 1-4 and 6-7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Johnson, U.S. Patent No. 6,614,977. In accordance with MPEP § 2131 anticipation requires each and every element of the claim to be disclosed in a single prior art reference.

Claims 1-4 and 6-7 are allowable over Johnson for at least the reason that Johnson fails to disclose each and every element in any of those claims.

As amended, independent claim 1 recites providing heavy-diatomic hydrogen gas within a reaction chamber, providing at least one compound having a heavy-hydrogen isotope substituent into the chamber and chemical vapor depositing a layer over a substrate incorporating at least a portion of the at least one compound. The amendment to claim 1 is supported by the specification at, for example, paragraph 29-31. Johnson discloses formation of layers utilizing deuterated precursors (col. 3, ll 29-38; and col. 4, ll 17-24). Johnson does not disclose the claim 1 recited providing of heavy-diatomic hydrogen and at least one compound having heavy-hydrogen isotope substituent, and incorporating at least a portion of the at least one compound during chemical vapor

depositing of a layer. Accordingly, independent claim 1 is not anticipated by Johnson and is allowable over this reference.

Claim 3 is amended to properly depend from independent claim 1. Dependent claims 2-3, 4 and 6-7 are allowable over Johnson for at least the reason that they depend from allowable base claim 1.

Dependent claim 5 is allowable in its dependent form for at least the reason that it depends from allowable base claim 1 and recites subject matter indicated by the Examiner to be allowable.

Claims 39-44 stand rejected under 35 U.S.C. § 112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner indicates that the recited "overall deposition rate having a degree of variance across the surface which is measurably improved relative to a corresponding degree of variance that occurs during deposition utilizing H₂ under otherwise substantially identical conditions" renders the meaning and scope of the claim unclear. Without admission as to the propriety of the Examiner's statements, independent claim 39 is amended to improve clarity. As amended, independent claim 39 recites a deposition which occurs at a net deposition rate having at least 18% decreased variance across a surface relative to a corresponding variance that occurs utilizing identical parameters and H₂ in place of heavy-diatomic hydrogen gas. Accordingly, applicant requests withdrawal of the § 112 rejection of independent claim 39 and pending claims 40 and 42-44 which depend therefrom.

For the reasons discussed above, claims 1-7, 39-40 and 42-44 are allowable. Accordingly, Applicant respectfully requests formal allowance of such pending claims in the Examiner's next Action.

Respectfully submitted,

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